

Claims

We claim:

1. A method of measuring the extent of resources or benefit
5 provided by a second user to a first user in a distributed
network, said method comprising the steps of:
associating a first trusted entity with the first user;
associating a second trusted entity with the second user;
receiving, from the first trusted entity, information about an
10 intended resource use;
providing a ticket, from a server to the first trusted entity,
wherein said ticket includes at least portion of said
information;
transmitting said ticket from the first trusted entity to the
15 second trusted entity;
having the second trusted entity modify the ticket;
transmitting said modified ticket to the first trusted entity;
having the first trusted entity send the ticket to the server;
and
20 utilizing said ticket and said modified ticket to determine
the extent of benefit or resources provided by the second user
to the first user.
- 25 2. The method of claim 1 wherein the benefit or resources
provided by the second user include at least one of provision
of a file, provision of bandwidth, provision of CPU cycles, or
provision of disk or memory storage.
- 30 3. The method of claim 1 wherein the ticket issued by the server
comprises at least one of a machine identification field, a
field for a file name, a field for a hash of a file, a field

for a randomly generated number, a weighting field, a time field, a value field, or a date field.

4. The method of claim 1 wherein the server stores a copy of said
5 ticket.

5. The method of claim 1 wherein the second trusted entity
validates the ticket by checking for a signature from the
server.

10 6. The method of claim 1 further comprising the step of having
the first trusted entity validate the ticket.

7. The method of claim 1 further comprising the step of having
15 the server authenticate the identity of the first trusted
entity prior to, or subsequent to, issuing said ticket.

8. The method of claim 1 wherein said first trusted entity is a
module incorporating authentication, encryption or data
20 signing capabilities in data communication with a computing
device.

9. The method of claim 7 wherein the first trusted entity
comprises a receipt request generator, receipt generator
25 module, and receipt validation module.

10. The method of claim 1 further comprising the step of having
the server conduct a redundancy check prior to, or subsequent
to, issuing the ticket.

30 11. The method of claim 10 wherein the step of conducting the
redundancy check is achieved by determining whether a file

being accessed by the first user has not already been downloaded.

5 12. The method of claim 1 wherein the step of having the second trusted entity modify the ticket comprises at least signing or authenticating the ticket.

10 13. The method of claim 12 further comprising the step of having the first trusted entity validate said signed ticket.

14. The method of claim 1 wherein the step of having the second trusted entity modify the ticket comprises adding details of the extent of resources shared by the second user.

15 15. The method of claim 1 further comprising the step of having the first trusted entity organize a plurality of tickets into a record and communicating said record to the server.

20 16. The method of claim 15 further comprising the step of determining, from said record, the extent of resources provided by a plurality of second users to a plurality of first users and modifying a database to record the extent of resources provided by said plurality of second users to said plurality of first users.

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17. A resource usage module capable of operating as a trusted entity in data communication with a computing device comprising a receipt request generator, receipt generator module, and receipt validation module.

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18. An event record for monitoring an extent of resources provided by a second user to a first user in a distributed

network comprising a plurality of tickets wherein each of said tickets comprises at least one of a randomly generated number field, a computing device identifier field, a date field and a time field, and a signature field and wherein each of said tickets contains information about the extent of resources provided by the second user to the first user or a value field.

19. A system for measuring the extent of resources provided by a second user to a first user in a distributed network, comprising:
a first trusted entity in data communication with a computing device used by a first user;
a second trusted entity in data communication with a computing device used by a second user;
a server in data communication with each of said first and second trusted entities wherein said server is capable of generating a ticket comprising at least one of a randomly generated number field, a computing device identifier field, a date field and a time field, a value field, and a signature field.

20. A method of awarding compensation to a second user based upon the extent of resources provided by said second user, operating a second computing device in data communication with a second trusted entity, to a first user, operating a first computing device in data communication with a first trusted entity, in a distributed network, said method comprising the steps of:
receiving, from the first trusted entity, information about an intended resource use;

providing a ticket, from a server to the first trusted entity,
wherein said ticket includes at least portion of said
information;

5 transmitting said ticket from the first trusted entity to the
second trusted entity;

having the second trusted entity modify the ticket;

transmitting said modified ticket to the first trusted entity;

utilizing said modified ticket to determine the extent of
resources provided by the second user to the first user; and

10 allocating value to said second user based upon said
determination of the extent of resources provided by the second
user.

21. The method of claim 20 wherein the resources provided by
15 the second user include at least one of processing power,
bandwidth, storage or memory.

22. The method of claim 20 wherein the ticket issued by the
server comprises at least one of a machine identification
20 field, a field for a file name, a field for a hash of a file,
a field for a randomly generated number, a weighting field, a
time field, value field, or a date field.

23. The method of claim 20 wherein the server stores a copy of
25 said ticket.

24. The method of claim 20 wherein the second trusted entity
validates the ticket by checking for a signature from the
server.

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25. The method of claim 20 further comprising the step of
having the first trusted entity validate the ticket.

26. The method of claim 20 further comprising the step of having the server authenticate the identity of the first trusted entity prior to issuing said ticket.

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27. The method of claim 20 wherein said first trusted entity is a module capable of digital signature authentication or generation in data communication with a computing device.

10 28. The method of claim 27 wherein the first trusted entity comprises a receipt request generator, receipt generator module, receipt validation module, and a selection process module.

15 29. The method of claim 20 further comprising the step of having the server conduct a redundancy check prior to, or subsequent to, issuing the ticket.

20 30. The method of claim 29 wherein the step of conducting the redundancy check is achieved by determining whether a file being accessed by the first user has not already been downloaded in whole or in part.

25 31. The method of claim 20 wherein the step of having the second trusted entity modify the ticket comprises at least authenticating or signing the ticket.

32. The method of claim 32 further comprising the step of having the first trusted entity validate said signed ticket.

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33. The method of claim 20 wherein the step of having the second trusted entity modify the ticket comprises adding details of the extent of resources shared by the second user.

5 34. The method of claim 20 further comprising the step of having the first trusted entity organize a plurality of tickets into a record and communicating said record to the server.

10 35. The method of claim 34 further comprising the step of determining, from said record, the extent of resources provided by a plurality of second users to a plurality of first users and modifying a database to record the extent of resources provided by said plurality of second users to said
15 plurality of first users.

36. The method of claim 20 further comprising providing the second user an interface to purchase a plurality of products using said allocated value.

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37. The method of claim 20 further comprising providing a website an interface that is capable of receiving a request by said website to validate a purchase from a user wherein said purchase uses said allocated value.

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